AFSC 1A8X2
Airborne Intelligence, Surveillance, and Reconnaissance (ISR) Operator

CAREER FIELD
EDUCATION AND TRAINING PLAN
(CFETP)

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RELEASABILITY: There are no releasability restrictions on this publication.

AIRBORNE ISR OPERATOR SPECIALTY
AFSC 1A8X2
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PART I

Preface

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and instill rigor in all aspects of career field training.

2. The CFETP consists of two parts; both of which are used by management to plan, manage, and control training within the career field.

2.1. **Part I** provides information necessary for overall management of the specialty. **Section A** explains how everyone will use the plan; **Section B** identifies career progression information, duties and responsibilities, training strategies, and career field path; **Section C** associates each level with specialty qualifications (knowledge, education, training, and other); **Section D** indicates resource constraints. Some examples are funds, manpower, equipment, and facilities. Note: Air Force Enlisted Classification Directory (AFECD) and AFI 36-2101, Classifying Military Personnel (Officer and Enlisted), contain the specialty descriptions.

2.2. **Part II** includes the following: **Section A** identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training, Air Education and Training Command (AETC) conducted training and correspondence course requirements. **Section B** contains the course objective list and training standards supervisors will use to determine if airmen satisfied training requirements. **Section C** identifies available training support materials. **Section D** identifies a training course index that is used to determine resources available to support training. Included here are both mandatory and optional courses. **Section E** identifies MAJCOM unique training requirements.

3. This CFETP is designed to ensure individuals in AFSC 1A8X2 receive comprehensive and effective training at the appropriate phases of their career. At unit level, supervisors and trainers use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

ABBREVIATIONS/TERMS EXPLAINED

Advanced Training (AT). Formal course that provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of the AFS.

Aircrew Fundamentals Course (AFC). A course designed to screen candidates for the rigors of enlisted aircrew duties prior to expending expensive follow-on training resources.

Air Force Career Field Manager (AFCFM). Individual appointed by Air Staff Deputy Chief of Staff to manage education, training, and resources for a specific career field(s).

Air Force Specialty (AFS). A group of duty positions that require common qualifications identified by a title and code. Each AFS is assigned an AFS Code (AFSC), to identify a specific career field and qualification level for Air Force officers and enlisted personnel. The first two digits of an AFSC (1A) identify the career field and the first three digits of an AFSC (1A8) identify the AFS. A full AFSC identifies a specific duty position within the AFS.

Air Force Specialty Manager. An individual on Air Staff responsible to the AFCFM for the day-to-day management of an AFS.

Basic Aircraft Qualification (BAQ). An aircrew member who has satisfactorily completed initial qualification training and is qualified to perform aircrew duties in the unit aircraft.

Basic Mission Capable (BMC). An aircrew member who has satisfactorily completed mission qualification training, does not maintain MR/CMR status, but maintains familiarization in the command or unit operational mission.

Career Development Course (CDC). A self-paced course designed to upgrade a skill level and provide the information necessary to satisfy the career knowledge component of OJT. They contain information on basic principles, techniques, and procedures common to an AFSC.

Career Enlisted Aviator (CEA). An individual with a primary AFSC within the 1AXXX Aircrew Operations career field.

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive, multipurpose document encapsulating the entire spectrum of training for a specialty. It outlines a logical growth path, including training resources and is designed to eliminate duplication and make training identifiable and budget defensible.

CEA Center of Excellence (CoE). The cornerstone of all career enlisted aviator training, conducted at Lackland AFB, TX. Provides undergraduate and initial skills training through the award of the 1-skill level.

Combat Mission Ready (CMR). An aircrew member who has satisfactorily completed mission qualification training and maintains qualification and proficiency in the command or unit combat mission.

Continuation Training (CT). Training for aircrew members already qualified in their respective aircrew position to maintain their assigned level of proficiency. CT is designed to progressively improve basic aircraft qualification, combat mission ready, basic mission capable, and aircrew members' ability to perform the unit's mission.

Course Objective Lists (COL). A publication, derived from the initial skills course training standard, that identifies the task and knowledge requirements, and respective standards provided to achieve a 3-skill level in this career field. Supervisors use the COL to conduct graduate evaluations in accordance with AFI 36-2201, Volume 3, *Air Force Training Program On-the-Job Training Administration*.

Course Training Standard (CTS). A training standard identifying the training members will receive in a specific course.

Crew Resource Management (CRM). The effective use of all available resources—people, weapon systems, facilities and equipment, and environment-by individuals or crews to safely and efficiently accomplish an assigned mission or task. The term "CRM" will be used to refer to the training program, objectives, and key skills directed to this end.

Cryptologic Training Advisory Group (CTAG). An authoritative group composed of key service and National Security Agency representatives, subject matter experts, course managers and service training commands that establishes, reviews, revalidates and revises cryptologic training curricula.

Cryptologic Training Specialty Training Standard (CTSTS). Created for each Cryptologic AFS by the CTAG to define the minimum training standards for a given Cryptologic specialty. The CTSTS standardizes training across the military services and DoD agencies.

Enlisted Specialty Training (EST). A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in each skill-level of a specialty.

Exportable Training. Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

Formal Training Unit (FTU). Unit tasked with training weapon system specific knowledge and skills necessary to execute a mission.

Initial Qualification Training (IQT). Training necessary to initially qualify a crewmember in a basic crew position and flying duties without regard to the unit's operational mission.

Initial Skills Training. A formal school course that results in award of a 3-skill level AFSC.

Instructional System Development (ISD). A deliberate and orderly, but flexible process for planning, developing, validating, implementing, and reviewing instructional programs. It ensures personnel are taught, in a cost efficient way, the knowledge and skills for successful job performance. Reference AFMAN 36-2234, *Instructional System Development.*

Lead Command. The lead entity for this specialty is AF ISR Agency for personnel and ACC for weapon systems. They establish standards, tasks, and formal training requirements and are responsible for updating training requirements and coordinating changes to the CFETP.

MAJCOM Functional Manager (MFM). Primary focal point and liaison between the MAJCOM and HQ USAF on all matters relating to the aircrew career fields and aviation resource management within the command. This includes, but is not limited to, responsibility for the aircrew training programs, coordination on aircrew resource allocations, and managing education, training, and resources for a specific career field(s) for that MAJCOM.

Major Weapons Systems (MWS). For the purpose of this CFETP, MWS consists of all applicable airborne platforms with a crew complement including at least one 1A8X2.

Mission Capable (MC). Status of an aircrew member who has satisfactorily completed mission qualification training but who does not maintain mission ready status.

Mission Design Series (MDS). A term used to identify a specific aircraft designation (e.g., EC-130, E-3B, RC-12).

Mission Ready (MR). An aircrew member who has satisfactorily completed mission qualification training and maintains qualification and proficiency in the command or unit operational mission.

Mission Qualification Training (MQT). Training necessary to qualify a crewmember in a specific aircrew position to perform the command's or unit's operational mission. MQT completion is a prerequisite for mission ready status.

On-the-Job Training (OJT). A delivery method used to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training. It is hands-on, over-the-shoulder training conducted at the duty location.

Qualification Training (QT). Actual hands-on task performance training designed to qualify an aircrew member in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skill/knowledge training required to do a job.

Resource Constraints. Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude desired training from being accomplished.

Specialty Training Standard (STS). An Air Force publication that describes an Air Force Specialty in terms of tasks and knowledge, which an airman in that specialty may be expected to perform or to know on the job. It further serves as a contract between AETC and the functional user. It shows which of the overall training requirements for an AFSC are taught in formal schools and exportable courses.

Standard. An exact value, a physical entity, or an abstract concept, established and defined by authority, custom, or common consent to serve as a reference, model, or rule in measuring quantities or qualities, establishing practices or procedures, or evaluating results. A fixed quantity or quality.

Total Force. All collective Air Force components (active, reserve, guard, and civilian elements) of the United States Air Force.

Upgrade Training (UGT). Training that leads to the award of a higher skill level in an Air Force Specialty.

Utilization and Training Workshop (U&TW). A forum of the AFCFM, MAJCOM functional managers (MFM), Subject Matter Experts (SME), and AETC training personnel that determines career ladder training requirements.

Weapons System Training Package (WSTP). An instructional course which includes IQT, MQT, and CT designed for use at the unit to qualify or aid qualification in a duty position, program, or on a piece of equipment. The WSTP may be printed, computer based, flying, simulator, or other audiovisual material.

Section A - General Information

1. Purpose.

This CFETP provides information necessary for the Air Force Career Field Manager (AFCFM), Air Force Specialty (AFS) manager, MAJCOM functional managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective and efficient career field training program. The plan outlines the training that individuals must receive in order to develop and progress throughout their career. For the purpose of this plan, training is divided into four areas: initial skills, upgrade training (UGT), qualification training (QT), and continuation training (CT). Initial skills training is the Air Force Specialty specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion required for award of the 5-, 7-, and 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge training required for the job. Continuation training is additional training either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to maintain their skills and knowledge beyond the minimum required. The CFETP has several purposes, some are:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.

1.2. Identifies task and knowledge training requirements for each skill level in this specialty and recommends training and education throughout each phase of an individual's career.

1.3. Lists training courses available in the specialty, identifies sources of training, and the training medium.

1.4. Identifies major resource constraints that impact full implementation of the desired specialty training program.

2. Uses.

The plan will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available and/or instituted for each individual in the specialty.

2.1. Training personnel will develop and revise formal resident, non-resident, and exportable training based on requirements established by the user and documented in Part II of the CFETP. The lead command MFM will work with the AFCFM to develop acquisition strategies for obtaining resources needed to provide the identified training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial and upgrade skills requirements. Identified requirements can be satisfied by OJT, resident training, contract training, or exportable courses. MAJCOM-developed training to support this AFSC must be identified for inclusion in this plan and must not duplicate available training resources.

2.3. The list of courses in Part II will be used as a reference to support training.

2.4. Personnel in AFSC 1AXXX are exempt from maintaining OJT Training Folders (AF Form 623 *Individual Training Record Folder*). All training not documented in Flight Evaluation Folder (FEF) will be documented in each Airman's six-part folder as follows:

    Part 1: CFETP/STS
    Part 2: Certifications
    Part 3: ISR skills training
    Part 4: ISR skills certifications
    Part 5: Waivers
    Part 6: Narrative Remarks

All training is certified via AF Form 8, *Certificate of Aircrew Qualification*, by trained evaluators. Certification of the AF Form 8 eliminates the requirement to document STS items in this CFETP.

3. Coordination and Approval.

The AFCFM is approval authority. The AFCFM will initiate an annual review of this document to ensure currency and accuracy. MAJCOM functional managers and AETC training managers will identify and coordinate on the career field training requirements. Using the list of courses in Part II, they will eliminate duplicate training. Send applicable inputs/changes to this CFETP through MAJCOM functional managers to HQ USAF/A2DFM, 1700 Air Force Pentagon, Washington D.C. 20330-1700.

Section B - Career Progression and Information

4. Specialty Description

4.1. Specialty Summary. Flies as primary aircrew onboard a wide variety of aircraft to operate, evaluate and manage airborne ISR information and related ground processing systems. Performs identification, acquisition, recording, analysis and reporting of assigned ISR tasks. Provides ISR threat warning support and interfaces with other units. Performs and assists with mission planning. Maintains assigned publications and currency items. Participates in theater and tactical-level ISR coordination networks. Processes, analyzes and disseminates ISR information obtained from onboard sensors during missions in progress

4.2. Duties and Responsibilities.

4.2.1 Process intelligence information in an airborne environment. Operates assigned intelligence systems and mission equipment. Uses operator workstations, graphical displays, recording devices and related equipment. Fields and operates sophisticated computerized radio receiver suites on various strategic and tactical ISR platforms. Conducts environmental surveys of radio frequency spectrum. Annotates electromagnetic events, measures parameters and compares results to previously catalogued signals to determine likely emitter source. Operates direction finding equipment. Analyzes structure and content of machine-based communications. Digitally archives key events for follow-on processing. Extracts essential elements of information for reportable significance. Disseminates threat warning information to affected entities via established channels. Maintains logs to document mission results. Prepares in-flight and post-mission reports.

4.2.2. Provide ISR information. Compares sensor data with in-flight ISR data and database files. Participates in mission planning and provides pre-mission inputs to maximize mission success. Uses coordinate reference systems. Coordinates mission profile requirements. Records special interest mission information. Understands status of mission aircraft, assigned target sets and air tasking order information.

4.2.3. Provides threat warning and actionable intelligence to customers as required. Achieves and maintains situational awareness of impending/ongoing air, ground and maritime combat operations. Employs intelligence information systems to satisfy air, ground, and maritime force intelligence and threat warning requirements. Provides threat warning information to aircrews and other agencies. Coordinates with airborne, ground, and maritime agencies to distribute and relay operational threat and identification data. Transmits identification and other mission information. Knowledgeable of U.S. and allied operations such as interception, interdiction, Close Air Support (CAS), Combat Search and Rescue (CSAR), Combat Air Patrol (CAP), reconnaissance, Offensive or Defensive Counter Air (OCA/DCA), Suppression of Enemy Air Defenses (SEAD), and Special Operations Forces (SOF).

4.2.4. Manage mission activities. Manages standardization, qualification, reports, records, and other requirements. Ensures accuracy, completeness, format, and compliance with current directives and mission system performance engineering preventive maintenance programs, and aircrew procedures.

4.2.5. Perform aircrew duties. Demonstrates and maintains proficiency in emergency equipment use and procedures, and egress. Performs pre-flight, through-flight, and post-flight inspections. Operates aircraft systems and equipment, such as electrical, interphone, door, and exits. Performs preventive maintenance on mission equipment. Ensures equipment and resources are externally clean, functional, and free from safety hazard. Reports malfunctions and observations. Supervises loading and off-loading of classified material and personal aircrew gear. Applies restraint devices, such as straps and nets, to prevent shifting during flight. Ensures access to escape exits.

4.2.6. Plan and organize mission conduct. Determines mission priorities. Adheres to Communication Security (COMSEC) procedures. Resolves operational and technical problems. Ensures crew complement and qualifications, equipment status, and operating efficiency are adequate to meet mission objectives.

5. Skill/Career Progression.

Adequate training and timely progression from the apprentice to the superintendent skill level play an extremely important role in the Air Force's ability to accomplish its mission. Therefore, it is essential that everyone involved in training do their part to plan, develop, manage, conduct, and evaluate an effective and efficient training program. The guidance provided in this part of the CFETP will ensure individuals receive viable training at the appropriate points in their career. The following narrative and the AFSC 1A8X2 career field flow charts identify the training career path. They define the training required in an individual's career.

5.1. Apprentice (3) Level. Meeting mandatory requirements listed in the AFECD specialty description, completion of the Aircrew Fundamentals Course at Lackland AFB, TX is mandatory. Tasks and knowledge training

requirements are identified in the specialty training standard, at Part II, Section A. Individuals must complete the initial skills course to be awarded AFSC 1A832.

5.2. Journeyman (5) Level. Upgrade training to the 5-skill level in this specialty consists of tasks and knowledge training provided in Career Development Course (CDC) 1AX5X and 1A852 (Note: both of these CDC volumes are currently under production and were not available at time of publication of this CFETP). Individuals should be considered for crew position upgrade training or intermediate and advanced skills training at this time. Meeting mandatory requirements listed in the AFECD specialty description, individuals must be recommended by their supervisors and minimum 12 months UGT. Individuals in retraining status are subject to the same training requirements and a minimum 9 months in UGT. Enter into upgrade training and order CDCs upon arrival at first permanent duty station. Locations with a flying Formal Training Unit may elect to defer upgrade training enrollment and CDC order until after completion of the FTU and assignment to the follow-on permanent duty station.

5.3. Craftsman (7) Level. Upgrade training to the 7-skill level in this specialty consists of holding at least the grade of SSgt and 12 months of experience, meeting mandatory requirements listed in the AFECD specialty description. Individuals should be considered for further crew position upgrades or cross flow to other weapon systems at this time. Individuals must be recommended by their supervisors. Individuals in retraining status are subject to the same training requirements and a minimum 6 months in UGT.

5.4. Superintendent (9) Level. Upgrade training to the 9-skill level in this specialty consists of holding the grade of SMSgt and having supervisor's recommendation. Must meet mandatory requirements listed in the AFECD specialty description.

5.5. Aircrew Member Badge. The aircrew wings are a mandatory uniform item for the 1A8X2 AFSC for Airmen graduating from the 3-level (1A83X) awarding course. Although aircrew wings are typically presented to Airmen graduating from the Aircrew Fundamentals Course (1A81X), these wings are only authorized for wear after graduating from the 3-level awarding course. Wear and permanent awarding requirements of the Basic/Senior/Chief Aircrew Member Badge will be IAW AFI 11-402 *Aviation and Parachutist Service, Aeronautical Ratings and Badges*. Failure to complete IQT is authority for supervisors to recommend revocation of wear of the aircrew member badge.

5.6. Intelligence Occupational Badge. 1A8XX Airmen are authorized to optionally wear the basic badge upon award of the 3-skill level and senior badge upon award of the 7-skill level. 1A8XX Airmen are authorized to optionally wear the master badge as a Master Sergeant (E-7) or above with five years in the specialty from award of the 1A8XX AFS. Chief Master Sergeants (E-9) cross-flowed into 1A800 are authorized to optionally wear the basic badge upon award of the AFS, senior badge after one year and master badge after five years.

6. Training Decisions.

The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Airborne ISR Operator specialty. This CFETP was developed to include life-cycle (day one through retirement) training requirements for this specialty. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training.

6.1. Initial Skills Training. This is a new AFS with a new initial skills training pipeline.

6.2. Five Level Upgrade Training. The Aircrew Fundamentals, 1AX5X, CDC is a pre-requisite volume prior to starting the AFSC 1A852 CDC. Completion of all CDC sets provides required training for upgrade in the Airborne ISR Operator related positions.

6.3. Seven Level Upgrade Training. The CSAF has approved a variance, eliminating the requirement for in-residence 7-level training for all 1AXXX (Aircrew Operations Career Field) personnel.

6.4. Cryptologic Training. The National Cryptologic School (NCS), run by NSA offers a variety of in-residence, exportable, self-paced, or distance learning courses. These courses provide training across a broad spectrum of topics. Local training managers maintain information on course listings.

6.5. Intern Programs. NSA offers various intern programs for airborne ISR operators. While the primary purpose of these intern programs is to develop airborne ISR analyst skills with broad intelligence skills, individuals applying for these programs are still required to meet all flying gates.

7. Community College of the Air Force (CCAF).

CCAF provides the opportunity to obtain an Associate in Applied Sciences (AAS) Degree. Enrollment in CCAF occurs upon completion of basic military training. Off-duty education is a personal choice but is highly encouraged.

In order to receive Senior Rater Endorsement on the EPR, individuals will obtain a CCAF degree and complete requisite PME. See the CCAF web site for program details regarding the AAS degree at: http://www.au.af.mil/au/ccaf . Additionally, see the Air Force Virtual Education Center website regarding AAS degree progress at: https://my.af.mil/afvecprod/. In addition to its associate degree program, CCAF offers the following:

7.1. Occupational Instructor Certification. The College offers the Occupational Instructor Certification to instructors teaching full time in a CCAF affiliated school. To qualify, instructors must complete an instructor course, a Teaching Practicum, have two years teaching experience, hold an associate or higher degree, and be recommended by their commander/commandant.

7.2. Instructor of Technology & Military Science Degree. This program is offered to enlisted members who are assigned to CCAF affiliated schools teaching CCAF degree-applicable courses. Applicants must complete three semester hours of CCAF-approved instructor methodology coursework and hold their career-field-related CCAF degree or equivalent civilian college degree before registration.

7.3. Trade Skill Certification. When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The College uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.

7.4. Degree Requirements: All Airmen are automatically entered into the CCAF Associate in Applied Science degree program. For award of this degree, Airmen must hold a 5-skill level and complete the following requirements:

Subject Area	Semester Hrs
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective	15
Total	**64**

7.4.1 The *Communications Applications Technology* (2IAL) program is the specific CCAF Associate in Applied Science degree program that applies to 1A8X2. Paragraphs 7.4.2 – 7.4.6 detail the various areas that can be used to satisfy the subject area semester hour requirements listed in paragraph 7.4. The Communications Applications Technology program is open to multiple specialties including 1A8XX, 1NXXX, 8D000 and 9L000, therefore areas that might not apply to 1A8X2 are included in the listings.

7.4.2. Technical Education (24 Semester Hours): Twenty-four semester hours are required to fulfill the technical education requirement. A minimum of 12 semester hours of technical core subjects or courses must be applied and the remaining semester hours applied from technical core or technical elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance by the Academic Programs Division at CCAF.

7.4.2.1. Technical Core (12-24 Semester Hours):

Technical Core Area	Max Semester Hours
Airborne Communications Systems	9
Broadcast Communication	24
CCAF Internship	18
Communications Analysis and Reporting	24
Cryptanalysis	12
Foreign Technical Language/Area Studies	18
Imagery Analysis	24
Introduction to Cartography	9
Photogrammetry	9

7.4.2.2. Technical Electives (0-12 Semester Hours):

Technical Electives Area	Max Semester Hours
Aerial Photography	6
Aeronautics	3
College Algebra or higher-level Mathematics	3

Communications System Operations	6
Computer Science	6
Intelligence Collection Management	6
International Studies	9
Interviewing	3
Principles of Communications	9
Principles of Electronics	6
Principles of Radar	6
Survival Training	4

7.4.3. Leadership, Management, and Military Studies (6 Semester Hours): The leadership, management and military studies (LMMS) requirement may be satisfied by applying professional military education, civilian courses accepted in transfer and/or by testing credit. However, the preferred method of completing leadership, management and military studies is through attending an airman leadership school, the NCO academy and/or the Air Force Senior NCO Academy.

7.4.4. Physical Education (4 Semester Hours): Completing basic military training satisfies the 4-semester-hour physical education requirement. Civilian courses do not apply to this requirement.

7.4.5. General Education (15 Semester Hours): Applicable courses must meet the criteria for application of courses to the General Education Requirement (GER) and be in agreement with the definitions of applicable General Education subject/courses as provided in the CCAF general catalog.

General Education Subject/Course	**Semester Hours**
Oral Communication (speech)	3
Written Communication (English composition)	3
Mathematics (intermediate algebra or college-level mathematics)	3
Social Science (anthropology, archaeology, economics, geography, government, history, political science, psychology and sociology)	3
Humanities (Courses in fine arts (criticism, appreciation, historical significance), foreign language, literature, philosophy and religion)	3

7.4.6. Program Elective (15 Semester Hours): Satisfied with applicable Technical Education, Leadership, Management, and Military Studies or General Education subjects/courses.

7.5. Air University Associate to Baccalaureate Cooperative (AU ABC). The AU ABC initiative establishes partnerships between the Air Force and accredited civilian higher education institutions to offer baccalaureate degree opportunities via distance learning. AU ABC links Airmen who have completed associate degrees to military friendly baccalaureate programs. AU ABC applies CCAF associate degree credit towards baccalaureate degrees and requires participants to complete no more than 60 semester hours after having earned an associate in applied science degree.

7.6. Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an Air Education and Training Command Instructor should be actively pursuing an associate's degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

8. Career Field Flow Charts.

Education and Training Requirements	Rank	GRADE REQUIREMENTS			
		Earliest Sew-on	Air Force Average	1A8X2 Average	High Year of Tenure (HYT)
Basic Military Training School (BMTS)	AB				
Apprentice Technical School **(3-Skill Level)**	Amn	6 months			
Upgrade To Journeyman **(5-Skill Level)** - Minimum 12 months on-the-job training - Minimum 9 months on-the-job training for retrainees - Complete appropriate CDC	A1C SrA	16 months 28 months	3 years	3 Years	12 years
Airman Leadership School (ALS) - Must be a SrA with 48 months time in service or be a SSgt selectee (ARC: Must be a SrA with 42 months time in service to accomplish ALS by correspondence) - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only)					
Upgrade To Craftsman **(7-Skill Level)** - Minimum rank of SSgt - 12 months OJT - 6 months OJT for retrainees	SSgt	3 years	4.7 years	4.7 Years	20 years
Noncommissioned Officer Academy (NCOA) - Must be a TSgt or TSgt selectee - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only) - Resident or correspondence graduation is a prerequisite for MSgt sew-on (ARC Only)	TSgt	5 years	9.5 years	9.5 Years	24 years
USAF Senior NCO Academy (SNCOA) - Must be a CMSgt selectee, SMSgt, SMSgt selectee, or a MSgt selected to attend - Resident graduation is a prerequisite for CMSgt sew-on (Active Duty Only) - Resident or correspondence graduation is a prerequisite for SMSgt sew-on (ARC Only)	MSgt	8 years	14.8 years	14.8 Years	26 years
Upgrade to Superintendent **(9-Skill level)** - Minimum rank of SMSgt.	SMSgt	11 years	20.5 years	20.5 years	28 years
Chief Enlisted Manager (CEM) - Minimum rank of CMSgt - Completed SNCO Academy (Active Duty Only) - Chief Leadership Course (CLC)	CMSgt	14 years	23.3 years	23.3 years	30 years
Data current as of January 2009					

Figure 8-1. Enlisted Education and Training Path
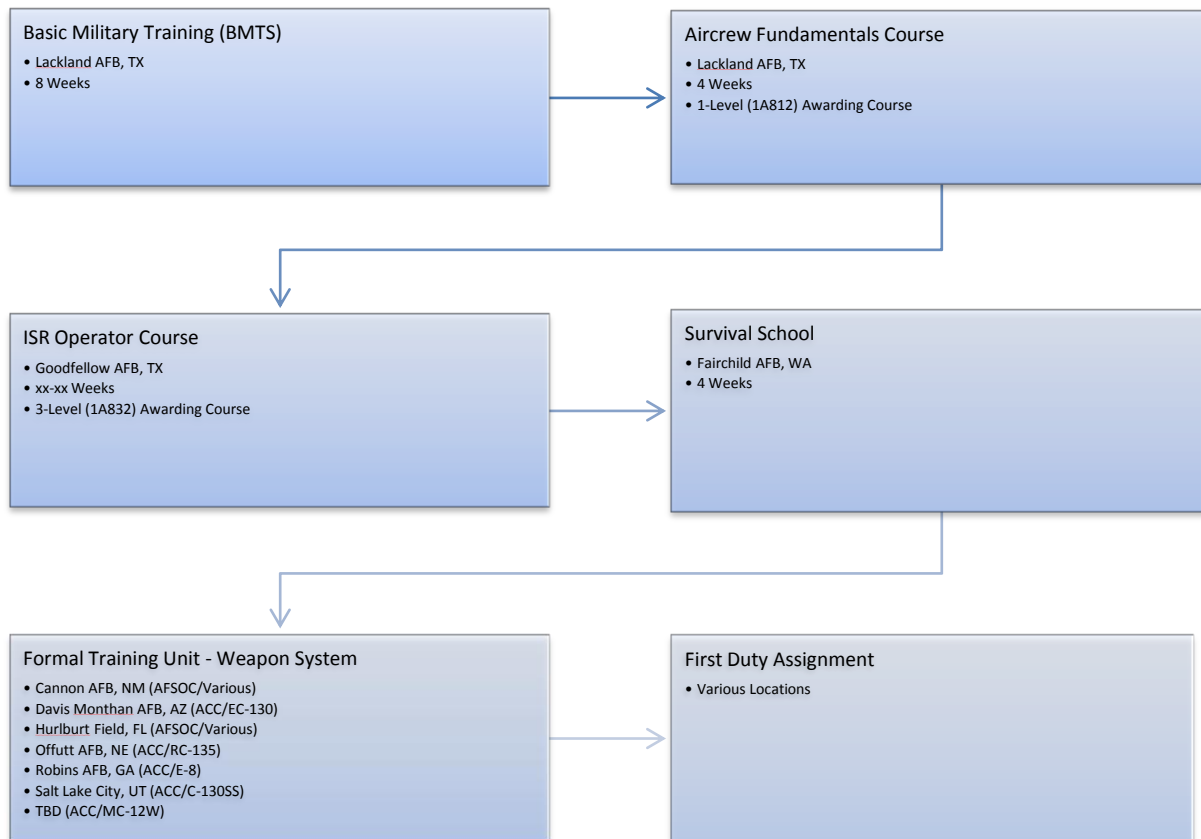
Figure 8-2. 1A8X2 Initial Skills Training Pipeline

8.1. The flow outlined in figure 2 (above) represents the formal training courses required for personnel entering and becoming fully qualified in the Airborne ISR Operator Specialty. The locations, course lengths, and titles are subject to change. Changes will be updated in the Education Training Course Announcement by the course owner.

8.2. The course flow has been developed and agreed upon by the MAJCOM functional managers to minimize days students are awaiting training and to ensure survival training is received prior to Initial Qualification Training, minimizing the impact of not having the prerequisites completed before entering weapons system training.

1A8X2 Airborne ISR Operator						
Apprentice	**Journeyman**	**Craftsmen**		**Superintendent**		**CEM**
AB, Amn, A1C	SrA	SSgt	TSgt	MSgt	SMSgt	CMSgt
Rank						
Badges/Wings Basic Aircrew Wings AFI 11-402 Basic Intel Badge AFI 36-2923		Senior Aircrew Wings - AFI 11-402 Senior Intel Badge – AFI 36-2923		Master Aircrew Wings – AFI 11-402 Master Intel Badge – AFI 36-2923		
PME	*Airmen Leadership School* -SSgt Select or SrA with 48 months TIS -Required to sew on SSgt		*NCO Academy* -TSgt or Select -Required to sew on MSgt	*AF or Joint Senior NCO Academy* -MSgt or Select for Non-resident -MSgt or SMSgt for Resident -Required to sew on CMSgt (Active Duty only)		*Chief Leadership Course* *Leadership Development Program* *Gettysburg Leadership Experience*
Upgrade Training *3-Level* 1A832 -Awarded upon graduation from Initial Skills Pipeline	*5-Level* 1A852 -12 months UGT, (retrainee-9 mo) -CDC enrollment -Supervisor recommends	*7-Level* 1A872 -Minimum rank of SSgt -UGT: 12 months/Retrainees-6 months			*9-Level* 1A890	*CEM* 1A800
Professional Development *CCAF* – Community College of the Air Force Associates Degree		*MECCAP* – Middle Enlisted Cryptologic Career Advancement Program (NSA, 3 years) *NSA National Cryptologic School* – various courses available			*BSI* – Bachelor or Science in Intelligence (National Defence Intelligence College-NDIC) *PGIP* – Post-Graduate Intelligence Program (NDIC)	
Jobs/ Opportunities *Initial Weapon System Training -* Formal Training Unit. - C-130SS, EC-130H, E-8, MC-12W, RC-135		*Additional Weapon System Training -* Formal Training Unit. - C-130SS, EC-130H, E-8, MC-12W, RC-135 *Advanced Weapon System Qualification* -Instructor, Evaluator, etc.	*Training* -AETC Instructor	*Staff Tour* -HQ USAF -MAJCOM/FOA -NAF -Wing -Group		*Management* -Career Field Manager -MAJCOM Functional Manager - Wing/Group/Squadron Superintendent

Figure 8.3: 1A8X2 Career Development Path

Note: Options listed in the career development path are not all-inclusive and are subject to change.

Location	CMS	SMS	MSG	TSG	SSG	SRA	A1C	Student
Pentagon, DC	X	X	X					
Buckley AFB, CO					X			
Cannon AFB, NM			X	X	X	X	X	
Corry Station, FL					X			
Davis-Monthan AFB, AZ		X	X	X	X	X	X	X
Fort Gordon, GA					X			
Fort Meade, MD			X	X	X			
Goodfellow AFB, TX			X	X	X	X		X
Hurlburt Field, FL	X	X	X	X	X	X	X	
Kadena AB, Japan	X	X	X	X	X	X	X	
Kunia, HI					X			
Lackland AFB, TX		X	X	X	X			
Langley AFB, VA	X		X	X				
Menwith Hill Station, UK				X	X			
Meridian, MS								
Misawa AB, JA					X	X		
Offutt AFB, NE	X	X	X	X	X	X	X	X
RAF Mildenhall, UK	X	X	X	X	X	X	X	
Randolph AFB, TX		X						
Robins AFB, GA	X		X	X	X	X	X	X
Salt Lake City, UT	X	X	X	X	X	X	X	X
Souda Bay, Greece		X						
NOTE: Data current as of January 2009.								

Figure 8-4. Assignment Locations

NOTE: The authorizations listed above are subject to change without notice. Crewmembers interested in assignments to locations listed should consult their MAJCOM functional manager or the AFPC resource manager for more detailed information about requirement for a specific location.

Section C - Skill Level Training Requirements

9. Purpose.

Skill level training requirements in this career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS at Part II, Sections A and B of this CFETP.

10. Specialty Qualifications.

10.1. Apprentice Level Training:

10.1.1. Specialty Qualification.

10.1.1.1. Knowledge. Knowledge is mandatory of: aircraft emergency equipment and procedures; ISR operations and related Cryptologic support to national agencies, service Cryptologic elements and theater elements; joint service relationships and operations concepts; radio propagation and modulation theory; radio communications networks, operations, and techniques; collection and processing procedures; signals and traffic analysis techniques; tasking strategies; reporting concepts, formats and procedures; mission planning and management; basic computer and electronic equipment operations; and methods for handling, distributing and safeguarding information.

10.1.1.2. Education. Completion of high school or having a general education development (GED) equivalency is mandatory for entry into this AFSC. Also, completion of courses in mathematics, keyboarding, and computers is desirable.

10.1.1.3. Training. Completion of the Aircrew Fundamental Course at Lackland AFB, TX is mandatory for pipeline and non-aviation service cross training students. Completion of the Airborne ISR Operator Course is mandatory for award of the 3-skill level AFSC.

10.1.1.4. Other. Physical qualification for aircrew duty according to AFI 48-123, Volume 3, *Medical Examinations and Standards Volume 3 – Flying and Special Operational Duty*, Flying Class III medical standards for entry, award, and retention of this AFSC is mandatory. Qualification for aviation service according to AFIs 11-401, *Aviation Management,* and 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*, for entry, award and retention of this AFSC are mandatory. For entry into this specialty, no record or history of temporomandibular joint pain or disorder. Eligibility for a top secret clearance according to AFI 31-501, *Personnel Security Program Management*, is mandatory for award and retention of the semi-skilled and skilled AFSCs.

10.1.2. Training Sources and Resources. Completion of the Airborne ISR Operator course and SERE satisfies the knowledge and training requirements specified in the specialty qualification section (above) for award of the 3-skill level. Completion of the Aircrew Fundamentals Course is mandatory for all 1A8X2 personnel, except for cross-trainees with previous aircrew qualifications.

10.1.3. Implementation. Entry into training is accomplished through initial accessions from BMTS or through retraining from any AFSC. After graduation from the Airborne ISR Operator course, IQT starts when an individual is assigned to their first duty position. Thereafter, upgrade training is initiated anytime an individual is assigned duties they are not qualified to perform.

10.2. Journeyman Level Training:

10.2.1. Specialty Qualification. All qualifications for AFSC 1A832 apply to the 1A852 requirements.

10.2.1.1. Knowledge. In addition to knowledge required for the 3-level and other qualifications as listed above, an individual must possess the knowledge and skills necessary to perform airborne ISR operations including an understanding of air tasking orders; receiving, recording, and relaying operational threat data. Completion of qualification criteria in current assigned aircraft is mandatory.

10.2.1.2. Education. To assume the rank of SSgt, individuals must be a graduate of the Airman Leadership School (ALS).

10.2.1.3. Training. Completion of the following is mandatory for award of the 5-skill level:

10.2.1.3.1. 12 months OJT.

10.2.1.3.2. Completion of 1AX5X Aircrew Fundamentals and 1A852 Airborne ISR Operator CDCs. Note: both of these CDCs are under production and were not available at the time this CFETP was published.

10.2.1.3.3. Recommendation by the supervisor.

10.2.1.4. Experience. Qualification in and possession of AFSC 1A832.

10.2.1.5. Other. Physical qualification for aircrew duty according to AFI 48-123, Volume 3, *Medical Examinations and Standards Volume 3 – Flying and Special Operational Duty*, Flying Class III medical standards for entry, award, and retention of this AFSC is mandatory. Qualification for aviation service according to AFIs 11-401, *Aviation Management*, and 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*, for entry, award and retention of this AFSC are mandatory. For entry into this specialty, no record or history of temporomandibular joint pain or disorder. Eligibility for a top secret clearance according to AFI 31-501, *Personnel Security Program Management*, is mandatory for award and retention of the semi-skilled and skilled AFSCs.

10.2.2. Training Sources and Resources. Completion of the 1AX5X Aircrew Fundamentals CDC and the 1A852 Airborne ISR Operator CDC satisfies the knowledge requirements specified in the specialty qualification section (above) for award of the 5-skill level.

10.2.3. Implementation. Entry into journeyman upgrade is accomplished upon arrival at the FTU (or first duty location for locations without an FTU). Enrollment into 5-level CDCs is accomplished once the Airman has completed IQT.

10.3. Craftsman Level Training:

10.3.1. Specialty Qualification. All 1A832 and 1A852 qualifications apply to the 1A872 requirements.

10.3.1.1. Knowledge. In addition to knowledge required for the 3- and 5-skill level and other qualifications as listed above, an individual must possess the aircrew and ISR mission management principles, knowledge, and supervisory skills necessary to supervise personnel performing airborne ISR operations and related duties, and operate and maintain Airborne Operations Systems.

10.3.1.2. Education. To assume the rank of MSgt, individuals must be graduates of the NCO Academy.

10.3.1.3. Training. Completion of the following requirements is mandatory for award of the 7-skill level:

10.3.1.3.1. Minimum rank of SSgt and 12 months OJT.

10.3.1.3.2. Completion of 1AX5X Aircrew Fundamentals CDC and the 1A852 Airborne ISR Operator CDC (or hold a 5-skill level in the AFSC).

10.3.1.3.3. Recommendation by the supervisor for award of the craftsman AFSC.

10.3.1.4. Experience. Qualification in and possession of AFSC 1A852.

10.3.1.5. Other. Physical qualification for aircrew duty according to AFI 48-123, Volume 3, *Medical Examinations and Standards, Volume 3-Flying and Special Operational Duty*, Flying Class III medical standards for entry, award, and retention of this AFSC is mandatory. Qualification for aviation service according to AFIs 11-401 and 11-402 for entry, award and retention of this AFSC are mandatory. For entry into this specialty, no record or history of temporomandibular joint pain or disorder. Eligibility for a top secret clearance according to AFI 31-501, *Personnel Security Program Management*, is mandatory for award and retention of the semi-skilled and skilled AFSCs.

10.3.2. Training Sources and Resources. The STS identifies all tasks required for qualification. Upgrade and qualification training are provided by qualified trainers using available aids written for the duty position, program to be managed, or equipment to be used.

10.3.3. Implementation. Entry into 7-level upgrade is effective 1 Sep each year if an individual is selected for promotion to E-5 with exceptions for STEP or out-of-cycle promotions.

10.4. Superintendent Level Training:

10.4.1. Specialty Qualifications.

10.4.1.1. Knowledge. In addition to knowledge required for the 7-skill level qualification, an individual must possess advanced skills and knowledge of concepts and principles of leadership and the effective management of Airborne ISR operations and personnel. Knowledge is mandatory of airborne ISR operations, conventional and special operations, joint and coalition military, intelligence requirements, administrative techniques, aircrew personnel management, staff functions, budgeting, scheduling, training development, inspections, and standardization and evaluation, aircrew management principles and supervisory techniques.

10.4.1.2. Education. To assume the grade of CMSgt, individuals must be an in-residence graduate of the USAF Senior NCO Academy or sister service Senior Academy.

10.4.1.3. Training. Completion of all training tasks is mandatory.

10.4.1.4. Experience. For AFSC 1A890, qualification is mandatory as an Airborne ISR Operator Craftsman.

10.4.1.5. Other. Physical qualification for aircrew duty according to AFI 48-123, Volume 3, *Medical Examinations and Standards Volume 3 – Flying and Special Operational Duty*, Flying Class III medical standards for entry, award, and retention of this AFSC is mandatory. Qualification for aviation service according to AFIs 11-401, *Aviation Management*, and 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*, for entry, award and retention of this AFSC are mandatory. For entry into this specialty, no record or history of temporomandibular joint pain or disorder. Eligibility for a top secret clearance according to AFI 31-501, *Personnel Security Program Management*, is mandatory for award and retention of the semi-skilled and skilled AFSCs.

10.4.2. Training Sources and Resources. The STS identifies all tasks required for qualification in the individual's duty position.

10.4.3. Implementation. Entry into upgrade training is initiated when an individual possesses the 7-skill level and assumes the rank of SMSgt.

Section D - Resource Constraints

11. Purpose.

This section identifies known resource constraints, which preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, are target completion dates. Resource constraints will be reviewed and updated at least annually.

12. FTU Training.

Lack of an FTU at Hurlburt Field and Cannon AFB significantly impacts current and future AFSOC training on existing and future MDS. Target completion date: FY2009. Lack of an FTU for MC-12 will be addressed in FY10.

13. Craftsman Level Training.

Lack of an Aircrew Management course has hampered development of the Career Enlisted Aviator NCOs and SNCOs. It has impacted their ability to assume and effectively execute higher-level aircrew management and leadership positions.

Part II

Section A – Specialty Training Standard (STS)

1. Implementation.

This STS will be used for technical training provided by AETC for classes beginning January 2009.

2. Purpose.

As prescribed in AFI 36-2201, this STS:

2.1. Lists in column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties at the 3- and 5-skill level AFSC in the Airborne Cryptologic Linguist Specialty ladder of the Aircrew Operations Career Field. These are based on an analysis of the duties in AFECD.

2.2. Column 2 (3-Skill Level and 5-Skill Level) shows formal training and correspondence course requirements as described in the Education and Training Course Announcements (ETCA) web site at: https://etca.randolph.af.mil/ and the career knowledge provided by the correspondence course. There is no advanced course. See AFIADL/AFSC/CDC listing maintained by the unit OJT manager for current CDC listings.

2.3. Qualitative Requirements. Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

2.4. Is a guide for development of promotion tests used in the Weighted Airmen Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the AF Occupational Measurement Squadron (AFOMS) by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members to be most appropriate for promotion to higher grades. Questions are based on study references listed in the WAPS study catalog. Individual responsibilities are in AFI 36-2605.

3. Recommendations.

Report unsatisfactory performance of individual course graduates. A 24-hour Customer Service Information Line (CSIL) is available for the supervisor's convenience to identify demonstrated over- or under-training on performance or knowledge items listed in the training standard. For a quick response to any training concern, call the CSIL, DSN 477-3350, anytime day or night or e-mail to 17trg.ccme@goodfellow.af.mil. Please reference specific STS paragraphs.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL   **DAVID A. DEPTULA, Lt Gen, USAF**
                                      DCS/Intelligence, Surveillance and Reconnaissance (A2)

5 Attachments:

1. Qualitative Requirements
2. STS: 1AXXX Core
3. STS: 1NXXX Core
4. STS: 1N2XX/1N5XX SIGINT Core
5. STS: 1A8X2 Specific

Attachment 1 Qualitative Requirements

THIS BLOCK FOR IDENTIFICATION PURPOSES ONLY		
NAME OF TRAINEE		
PRINTED NAME *(Last, First Middle Initial)*	INITIALS *(Written)*	Last 4 of SSAN
PRINTED NAME OF CERTIFYING OFFICIAL AND WRITTEN INITIALS		
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	

QUALITATIVE REQUIREMENTS

PROFICIENCY CODE KEY		
	SCALE VALUE	DEFINITION: The Individual
TASK PERFORMANCE LEVELS	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)
	2	Can do most parts of the task. Needs help only on hardest parts. (PARTIALLY PROFICIENT)
	3	Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)
**TASK KNOWLEDGE LEVELS	a	Can name parts, tools, and simple facts about the task. (NOMENCLATURE)
	b	Can determine step by step procedures for doing the task. (PROCEDURES)
	c	Can identify why and when the task must be done and why each step is needed. (OPERATING PRINCIPLES)
	d	Can predict, isolate, and resolve problems about the task. (ADVANCED THEORY)
***SUBJECT KNOWLEDGE LEVELS	A	Can identify basic facts and terms about the subject. (FACTS)
	B	Can identify relationship of basic facts and state general principles about the subject. (PRINCIPLES)
	C	Can analyze facts and principles and draw conclusions about the subject. (ANALYSIS)
	D	Can evaluate conditions and make proper decisions about the subject. (EVALUATION)

EXPLANATIONS

** A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Examples: b and 1b)

*** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.

- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.

x This mark is used alone in course columns to show that training is required but not given due to limitations in resources.

@ This mark is used to show that training is conducted by Aerospace Physiology during Aircrew Fundamentals.

@@ This mark is used to show the five general education requirements by CLEP/DANTES (pass or fail) towards CCAF degree

£ This mark is used to identify training that will be conducted by Field Training Units (FTUs). This training will be tailored to meet MAJCOM mission specific requirements necessary for the completion of Initial Qualification Training (IQT) and Mission Qualification Training (MQT). Qualitative requirements will determined by applicable MAJCOM.

Users are responsible for annotating training references (TR) to identify current references pending STS revision

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
Attachment 2: STS - 1AX Core (Aircrew Fundamentals)				
1. CAREER LADDER PROGRESSION **TR: AFI 36-2101, AFI 36-2104, AFI 11-401, AF Mission Directives**				
1.1. Progression within 1AXXX AFSC's	A	-	B	-
1.2. Duties within 1AXXX AFSCs	A	-	B	-
1.3. Total Force	A	-	B	-
1.3.1. MAJCOM Missions	A	-	B	-
1.4. Joint / Combined	A	-	B	-
2. SECURITY **TR: DODR 5200.1, AFI 10-1101, 31-201v2, 31-401, 33-208, 33-211, 10-701**				
2.1. COMSEC relating to aircrew	A	-	B	-
2.2. OPSEC relating to aircrew	A	-	B	-
2.3. Perform Anti-Hijacking / Anti-Terrorism Procedures	1a	-	-	-
2.4. Information Security relating to aircrew	A	-	B	-
2.5. Physical Security relating to aircrew	A	-	B	-
2.5.1. Perform flight line security procedures	1a	-	-	-
3. CREW RESOURCE MANAGEMENT (CRM) **TR: AFI-11-290**				
3.1. Crew Resource Management fundamentals	A	-	B	-
3.2. Communication				
3.2.1. Terms and definitions	B	-	-	-
3.2.2. Radio discipline	A	-	-	-
4. AVIATION SAFETY / AF OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM **TR: AFI 32-7806, 91-201, 91-202, 91-301, 91-302, 91-303, 123-1, AFMAN 24-204, AFOSH Std 91-25, 91-66, 91-100, AFPAM 91-121**				
4.1. Aviator hazards				
4.1.1. Engine air intake and exhaust	A	-	B	-
4.1.1.1. Apply appropriate safety measures	1a	-	-	-
4.1.2. High intensity sound	A	-	B	-
4.1.2.1. Apply appropriate safety measures	1a	-	-	-
4.1.3. Rotor / propeller planes of rotation	A	-	B	-
4.1.3.1. Apply appropriate safety measures	1a	-	-	-
4.1.4. Antenna radiation	A	-	B	-
4.1.4.1. Apply appropriate safety measures	1a	-	-	-
4.1.5. Aircraft Electrical System	A	-	-	-
4.1.5.1. Apply appropriate safety measures	1a	-	-	-
4.1.6. Ground support equipment	A	-	B	-

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
4.1.6.1. Apply appropriate safety measures	1a	-	-	-
4.2. Weather	A	-	-	-
4.3. Bird Avoidance Strike Hazard (BASH) Program	A	-	-	-
4.4. Hazardous Materials (HAZMAT)	A	-	B	-
4.5. Foreign Object Damage (FOD) Hazards / Prevention	A	-	B	-
4.6. High intensity light (Strobes)	A	-	B	-
5. PUBLICATIONS **TR: AFI 11-215, 33-360, 37-160v1, T.O. 00-20, 00-5-1/2, DODR 4500-32v1, 11-202v2**				
5.1. Air Force Technical Order's	B	-	B	-
5.1.1. Use T.O.s	2b	-	-	-
5.1.2. Post changes	2b	-	-	-
5.2. Publications	B	-	B	-
5.2.1. Use publications	2b	-	-	-
5.2.2. Post changes	2b	-	-	-
5.3. Flight Publication Improvement Reports	B	-	B	-
5.3.1. Complete flight publication improvement report (AF Form 847)	2b	-	-	-
5.4. AFTO IMT 781 series	B	-	B	-
5.4.1. Use AFTO IMT 781A	1a	-	-	-
5.5. Flight Crew Information File (FCIF)	B	-	B	-
5.5.1. Use Flight Crew Information File (FCIF)	2b	-	-	-
6. AIRCREW/FLIGHT MANAGEMENT **TR: AFPD 11-4, AFI 11-401, 11-402, 11-412, 11-202, 38-201, 48-123v3**				
6.1. Responsibilities of HQ USAF and MAJCOM Aircrew Managers	-	-	A	-
6.2. Flight authorization	A	-	A	
6.3. Aviation Resource Management (ARM)				
6.3.1. Host Aviation Resource Management (HARM)	A	-	A	-
6.3.2. Squadron Aviation Resource Management (SARM)	A	-	A	-
6.4. Flight Records Folder (FRF)	A	-	A	-
6.5. Aviation service, aeronautical ratings, badges	A	-	B	-
6.6 Flight pay / Career Enlisted Flight Incentive Pay (CEFIP) / gates	B	-	B	-
6.7. Flight medicine				
6.7.1. Flight surgeon functions	B	-	B	-
6.7.2. Grounding / Duties Not Including Flying (DNIF) status	B	-	B	-
6.8. Aircrew member responsibilities				
6.8.1. Crew rest	A	-	B	-
6.8.2. Restrictions	A	-	B	-
7. AIRCREW TRAINING / SUPERVISION **TR: AFI 11-2MDS V1, 11-202v1/2, 36-2101, 36-2201, Education & Training Course Announcements (ETCA)**				
7.1. Physiological Training	@	-	-	-

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
7.2. General education requirements	@@	-	-	-
7.3. Initial qualification training	A	-	B	-
7.4. Mission qualification training	A	-	B	-
7.5. Continuation training / maintaining currency	A	-	B	-
7.6. Requalification training	A	-	-	-
7.7. Flight Training Records	A	-	B	-
7.8. Standardization/Evaluation duties	A	-	B	-
7.9. Flight Evaluation Folder (FEF)	A	-	B	-
7.10. Life support equipment	A	-	-	-
8. AERODYNAMICS **TR: -1 T.O., AFH 11-203v1, T.O. 1-1B-50**				
8.1. Fixed wing	A	-	-	-
8.2. Rotary wing	A	-	-	-
8.3. Aircraft general (basic construction)	A	-	-	-
8.4. Flight controls	A	-	-	-
8.5. Instruments	A	-	-	-
8.6. Aircraft Weight and Balance				
8.6.1. Principles	A	-	-	-
8.6.3. Solve math problems	1a	-	-	-
9. AIRCREW ACTIVITIES **TR: -1 T.O., -9 T.O, AFI 10-707, 1-202**				
9.1. Mission briefings	A	-	-	-
9.1.1. Mission planning documents	A	-	-	-
9.2. Professional Equipment	A	-	A	-
9.3. Perform egress procedures	1a	-	-	-
9.4. Identify aircraft emergency equipment	1a	-	-	-
9.5. Oxygen	A	-	A	-
9.6. Joint Spectrum Interference Resolution (JSIR) / Air Force Spectrum Interference Resolution (AFSIR)	A	-	B	-
10. AIRCRAFT SYSTEMS / EQUIPMENT **TR: -1 T.O., MAJCOM guidance and T.O. 00-25-172, AFI 11-202**				
10.1. Electrical	A	-	-	-
10.2. Hydraulic	A	-	-	-
10.3. Environmental	A	-	-	-
10.4. Communications	A	-	-	-
10.5. Oxygen	A	-	-	-
10.6. Fuel	A	-	-	-
10.7. Concurrent servicing	A	-	-	-
10.8. Fleet Service equipment	A	-	-	-
10.9. Engines	A	-	-	-
10.10. Navigation lighting	A	-	-	-

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
Attachment 3: STS - 1NXXX Core				
11. SAFETY				
11.1. Safety TR: AFI 91-202, 91-301, OSHA	-	A	-	A
12. SECURITY				
12.1. Information Security (INFOSEC) TR: AFI 31-401	-	A	-	B
12.2. Communications Security (COMSEC) TR: AFI 31-401	-	A	-	B
12.3. Operations Security (OPSEC) TR: AFI 10-701	-	A	-	B
12.4. Physical Security TR: AFI 31-102	-	A	-	B
12.5. Personnel Security TR: AFI 31-501	-	A	-	B
12.6. Emission Security (EMSEC) TR: AFI 33-203 VI	-	A	-	B
12.7. Computer Security (COMPUSEC) TR: AFI 33-203 VI	-	A	-	B
12.8. Intelligence Oversight Program TR: AFI 14-104	-	A	-	B
12.9. Host Government Communications TR: NSA SP0009	-	A	-	B
12.10. SCI classification TR: DoD 5200.1-R	-	A	-	B
12.11. Security Derivative Classifications TR: DoD 5200.1-R	-	A	-	B
12.12. Safeguard Classified TR: DoD 5200.1-R, EO 12958	-	2b	-	B
13. INTELLIGENCE ORGANIZATIONS AND MISSIONS				
13.1. National and Service Intelligence Organizations				
13.1.1. Office of the Director of National Intelligence (ODNI) TR: Joint Pub 2-0, DNI.gov	-	A	-	B
13.1.2. Central Intelligence Agency (CIA) TR: Joint Pub 2-0, CIA.gov	-	A	-	B
13.1.2.1. Director of Central Intelligence (DCI) TR: Joint Pub 2-0, CIA.gov	-	A	-	B
13.1.3 Defense Intelligence Agency (DIA) TR: Joint Pub 2-0, DIA.gov	-	A	-	B
13.1.4. National Security Agency (NSA) TR: Joint Pub 2-0, NSA.gov	-	A	-	B
13.1.5. National Geospatial Intelligence Agency (NGA) TR: Joint Pub 2-0, NGA.gov	-	A	-	B
13.1.6. National Reconnaissance Office (NRO) TR: Joint Pub 2-0, NRO.gov	-	A	-	B
13.1.7. Army Intelligence TR: Army Reg 10-87, INSCOM.gov	-	A	-	B
13.1.8. Air Force Intelligence TR: Joint Pub 2-0, AFPD 14-1, AFI 14-105	-	A	-	B
13.1.8.1. HQ USAF A2	-	A	-	B
13.1.9. Navy and Marine Corps Intelligence TR: ONI NDP 2	-	A	-	B
13.1.10. Joint Activities (such as JICs, GNCSs) TR: Joint Pub 2-0	-	A	-	B
13.1.11. US Cryptologic System and SCEs TR: NSA.smil.mil	-	A	-	B
13.2. The Intelligence Roles in Government Organizations				
13.2.1. Executive Branch	-	A	-	B

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
TR: www.intelligence.gov				
13.2.2. Joint Chiefs of Staff (JCS) TR: JCS.mil	-	A	-	B
13.2.3. Unified Commands TR: AFI 10-400, Unified Command homepages (ie www.socom.mil)	-	A	-	B
13.2.4. Joint Task Force (JTF) TR: Joint Pub 2-0, Joint Pub 3-0	-	A	-	B
13.2.5. Coalition Forces TR: Joint Pub 2-1	-	A	-	B
13.2.6. Major Commands (MAJCOMs) TR: afhra.maxwell.af.mil	-	A	-	B
13.2.7. Department of Defense TR: DoD.gov	-	A	-	B
13.2.8. Department of Homeland Security TR: DHS.gov	-	A	-	B
14. INTELLIGENCE DISCIPLINES/AIR FORCE SPECIALTY (AFS)				
14.1. Capabilities and limitations of Signals Intelligence (SIGINT) TR: Enlisted Classification Directory (ECD), intelligence.gov	-	B	-	B
14.2. Capabilities and limitations of Measurement and Signature Intelligence (MASINT) TR: ECD, intelligence.gov	-	B	-	B
14.3. Capabilities and limitations of Human Intelligence (HUMINT) TR: ECD, intelligence.gov	-	B	-	B
14.4. Capabilities and limitations of Geospatial-Intelligence (GEOINT) TR: ECD, intelligence.gov	-	B	-	B
14.5. Capabilities and limitations of Open Source Intelligence (OSINT) TR: ECD, intelligence.gov	-	B	-	B
14.6. Functions of Intelligence AFSCs TR: ECD, intelligence.gov	-	B	-	B
15. AIR FORCE INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE DOCTRINE				
15.1. Military Operations Other Than War (MOOTW) TR: AFDD 2-9, Joint Pub 2-0, Joint Pub 3-7	-	A	-	B
15.2. Levels of War TR: AFDD 2-9, Joint Pub 2-0	-	A	-	B
16. INFORMATION OPERATIONS (IO)				
16.1. IO Doctrine TR: AFDD 2-5, Joint Pub 3-13	-	A	-	B
16.2. Fundamentals of IO TR: AFDD 2-5, Joint Pub 3-13	-	A	-	B
16.3. Influence Operations TR: AFDD 2-5, Joint Pub 3-13	-	A	-	B
16.4. Network Warfare Operations TR: AFDD 2-5, Joint Pub 3-13	-	A	-	B
16.5. Electronic Warfare Operations TR: AFDD 2-5, Joint Pub 3-13	-	A	-	B
16.6. IO Planning and Execution TR: AFDD 2-5, Joint Pub 3-13	-	A	-	B
16.7. Physical Attack TR: AFDD 2-5, Joint Pub 3-13	-	A	-	B
16.8. Intelligence Surveillance and Reconnaissance (ISR) TR: AFDD 2-9	-	A	-	B
17. CRITICAL THINKING **TR: FM 34-130, FM 34-3, FM 34-60, FM 101-5-1, Joint Pub 2-01.3, Joint Pub 1-02, "Psychology of Intel Analysis", Morgan Jones "The Thinkers Tool Kit"**				
17.1. Apply Principles of Critical Thinking	-	1a	-	B
17.2. Conduct Online Data Search	-	A	-	B

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
18. COMPUTER APPLICATIONS **TR: Kong "Intro to Computers"**				
18.1. E-Mail	-	A	-	-
18.2. Spreadsheet	-	A	-	-
18.3. Presentation Software	-	A	-	-
18.4. Word Processing Software	-	A	-	-
18.5. Chat/Communications Software	-	A	-	-
19. INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE (ISR) OPERATIONS				
19.1. ISR Process				
19.1.1. Planning and Direction TR: AFDD 2-9	-	A	-	B
19.1.2. Collection TR: AFDD 2-9	-	A	-	B
19.1.3. Processing and Exploitation TR: AFDD 2-9	-	A	-	B
19.1.4. Analysis and Production TR: AFDD 2-9	-	A	-	B
19.1.5. Dissemination and Integration TR: AFDD 2-9	-	A	-	B
19.1.5.1. National Tactical Integration TR: AFISRAI 14-106	-	A	-	B
19.1.6. Evaluation and Feedback TR: AFDD 2-9	-	A	-	B
19.2. ISR Assets				
19.2.1. Operational Characteristics, Capabilities and Limitations of US and Multinational Assets TR: AFDD 2-9	-	A	-	B
19.2.2. Operational Characteristics, Capabilities and Limitations of DCGS TR: AFTTP 3-1.6	-	A	-	B
19.2.3. Collections Requirements Management Procedures, Processes and Tools TR: AFDD 2-9	-	A	-	B
20. AIR AND SPACE OPERATIONS CENTER (AOC)				
20.1. Composition, Organization and Integration TR: AFI 10-401, AFI 13-1, AOC Vol 3	-	A	-	B
20.2. Functions and Tasks TR: AFI 10-401, AFI 13-1, AOC Vol 3	-	A	-	B
21. PREDICTIVE BATTLESPACE AWARENESS (PBA)				
21.1. PBA TR: Joint Pub 2-01.3, AFI 14-118	-	A	-	B
22. FUNDAMENTALS OF TARGETING				
22.1. Fundamentals of Targeting TR" AFDD 2-1.9	-	A	-	B
23. US AND FRIENDLY FORCES FAMILIARIZATION **TR: AFTTP 3-1 All Vols**				
23.1. Aerospace	-	A	-	B
23.2. Ground	-	A	-	B
23.3. Naval	-	A	-	B
23.4. Special Operations Mission and Capabilities	-	A	-	B
24. GEOSPATIAL INFORMATION AND SERVICES (GI&S)				

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
24.1. Identify and Extract Marginal Data and Symbology TR: Joint Pub 2-3, 1N151 CDC	-	1a	-	B
24.2. Manually Plot Coordinates TR: Joint Pub 2-3, 1N151 CDC	-	1a	-	B
25. CONTINGENCY OPERATIONS				
25.1. Expeditionary Air Force TR: AFI 10-401	-	A	-	B
25.2. Marine Air Ground Task Force (MAGTF) TR: USMC.mil	-	A	-	B
25.3. Naval Carrier Strike Battle Group TR: NAVY.mil	-	A	-	B
25.4. Interim Brigade Combat Team (IBCT) TR: sbct.navy.mil	-	A	-	B
25.5. Special Operations/Joint Special Operations Task Force (JSOTF) TR: Joint Pub 3-5.1	-	A	-	B
25.6. Coalition Operations TR: Joint Pub 2-1	-	A	-	B
25.7. Personnel Recovery TR: AFDD 2-9	-	A	-	B
25.8. OPORD/OPLAN TR: AFDD 2-9	-	A	-	B
26. AIR FORCE DOCTRINE				
26.1. Air Force Doctrine TR: AFDD 1	-	A	-	B
27. JOINT DOCTRINE				
27.1. Joint Doctrine TR: Joint Pub 2-1	-	A	-	B
Attachment 4: STS - 1N2XX/1N5XX SIGINT Core				
28. ORGANIZATION **TR: ATH Vol 1; DCID 1/8; ELINT Business Plan; Joint Tactical Exploitation of National Systems (JTENS); NSOC Organizational Manual; TSSC Homepage; PROFORMA Enterprise CONOP; PROFORMA Signals Handbook; RASIN Manual; USSID AP2402, AP2451, CR1200, CR1200 Annex C, SE1000 series, SE2000 series, SE3000 series, SP0001**				
28.1. Mission, Function and Responsibility of the Following DoD Organizations				
28.1.1. United States SIGINT System (USSS)				
28.1.1.1. SIGINT Field Sites	-	A	-	B
28.1.1.2. ELINT Community	-	A	-	B
28.1.1.2.1. Roles and Missions of Scientific Production Centers (SPCs) and How They Support the National SIGINT Mission	-	A	-	B
28.1.1.2.2. Roles and Missions of Intermediate Production Centers (IPCs) and How They Support the National SIGINT Mission	-	A	-	B
28.1.1.3. National Security Operations Center (NSOC) and ELINT Watch Officer (EWO)	-	A	-	B
28.1.1.4. Tasking Authority	-	A	-	B
28.2. Purpose of the Following Intelligence Functions				-
28.2.1. COMINT	-	B	-	B
28.2.2. ELINT	-	B	-	B
28.2.3. FISINT	-	B	-	B
28.2.4. PROFORMA	-	A	-	B
28.2.5. IMINT	-	B	-	B

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
29. PRINCIPLES OF ELECTROMAGNETIC (EM) ENERGY **TR: SIGA2800; SIGE2810; SIGG2100, 3201; INTELINK: harvest.z6.z.nsa/Z6TRAIN/training/train.htm;**				
29.1. Relationships, Properties, Characteristics and Aspects of EM Energy	-	B	-	B
29.2. Terms Associated with EM energy to Include, but Limited to:				
29.2.1. EM Energy	-	B	-	B
29.2.2. EM Spectrum	-	B	-	B
29.2.3. Radio Frequency (RF)	-	B	-	B
29.2.4. RF Spectrum	-	B	-	B
29.3. Aspects of Waveforms, Terms, Concepts, Characteristics, and Display Techniques Associated with EM Energy				
29.3.1. Sine Wave	-	B	-	B
29.3.1.1. Cycle	-	B	-	B
29.3.1.2. Period (time)	-	B	-	B
29.3.1.3. Wavelength	-	B	-	B
29.3.1.4. Frequency (rate)	-	B	-	B
29.3.1.5. Phase (angle/frequency)		B	-	B
29.3.2. Complex Waveforms				
29.3.2.1. Linear/Nonlinear Mixing	-	B	-	B
29.3.2.2. Fourier Components (series)	-	A	-	-
29.3.2.3. Bandwidth	-	A	-	B
29.3.2.4. Pulse Characteristics	-	B	-	B
29.3.3. Signal-to-noise Ratio	-	A	-	B
29.3.4. Perform Parametrical Measurements				
29.3.4.1. Carrier Frequency	-	2b	-	B
29.3.4.2. Bandwidth	-	2b	-	B
29.3.4.3. Modulation Rate/Data Rate	-	2b	-	B
29.3.4.4. Recordings	-	2b	-	B
29.4. Aspects of Modulation Associated with EM Energy, Such as:				
29.4.1. Amplitude Modulation				
29.4.1.1. Double Sideband (DSB)	-	A	-	B
29.4.1.2. Single Sideband (SSB)	-	A	-	B
29.4.1.3. Independent Sideband (ISB)	-	A	-	B
29.4.1.4. Amplitude Shift Keyed (ASK)	-	A	-	B
29.4.2. Angle Modulation				
29.4.2.1. Frequency Modulation	-	B	-	B
29.4.2.2. Phase Modulation	-	B	-	B
29.4.2.3. Frequency Shift Keyed (FSK)	-	A	-	B
29.4.2.4. Phase Shift Keyed (PSK)	-	A	-	B
29.4.2.5. Quadrature Amplitude Modulation (QAM)	-	A	-	B

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
29.4.3. Multiplexing				
29.4.3.1. Frequency Division Multiplexing (FDM)	-	A	-	B
29.4.3.2. Frequency Division Multiple Access (FDMA)	-	A	-	B
29.4.3.3. Orthogonal Frequency Division Multiplexing (OFDM)	-	A	-	B
29.4.3.4. Time Division Multiplexing (TDM)	-	A	-	B
29.4.3.5. Time Division Multiple Access (TDMA)	-	A	-	B
29.4.3.6. Code Division Multiple Access (CDMA)	-	A	-	B
29.4.3.7. Statistical Multiplexing	-	A	-	B
29.4.4. Pulse Modulation				
29.4.4.1. Pulse Amplitude Modulation (PAM)	-	B	-	B
29.4.4.2. Pulse Frequency Modulation (PFM)	-	B	-	B
29.4.4.3. Pulse Code Modulation (PCM)	-	B	-	B
29.4.4.4. Pulse Duration Modulation (PDM)	-	B	-	B
29.4.4.5. Pulse Position Modulation (PPM)	-	B	-	B
29.4.4.6. Pulse Group Modulation (PGM)	-	B	-	B
29.4.5. Spread Spectrum				
29.4.5.1. Types of Spread Spectrum	-	A	-	B
29.4.5.1.1. RF Hopping	-	A	-	B
29.5. Antenna Characteristics				
29.5.1. Type	-	A	-	B
29.5.2. Impedance	-	A	-	A
29.5.3. Radiation Pattern	-	A	-	B
29.5.4. Bandwidth	-	A	-	B
29.5.5. Beamwidth	-	A	-	B
29.5.6. Gain	-	A	-	B
29.5.7. Polarization	-	A	-	B
29.5.8. Reciprocity	-	A	-	B
29.5.9. Directivity	-	A	-	B
29.5.10. Transmission Line	-	A	-	A
29.5.11. Arrays	-	A	-	B
29.5.12. Functions	-	A	-	B
29.6. Aspects of Radio Wave Propagation, to include, but not limited to:				
29.6.1. Characteristics (Absorption, Reflection, Scatter, Refraction, Noise, and Defraction:	-	A	-	B
29.6.2. Atmospheric Layers	-	A	-	B
30. SIGNALS PROCESSING **TR: Analysis Techniques Handbook (ATH), JTENS, SIGE2810, MSIC SIGINT Tutorial, INTELINK: harvest.z6.z.nsa/Z6TRAIN/training/train.htm**				
30.1. Signals Processing Function and Display of the Following Analog Equipment:				
30.1.1. Oscilloscope	-	A	-	-

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
30.1.2. Spectrum Analyzer	-	A	-	-
30.2. Principles of Digital Signal Processing and Analog to Digital Conversion	-	A	-	-
31. RADAR FUNDAMENTALS **TR: JTENS, EPL, GALE Lite User's Guide**				
31.1. Fundamentals of RADAR Operation to include:				
31.1.1. RADAR Definition	-	A	-	B
31.1.2. Principles of Operation	-	A	-	B
32. ORBITAL MECHANICS / SATELLITES **TR: JTENS, INTELINK: www.ic.gov/wiki/index.php/Orbit**				
32.1. Relationships, Properties, Characteristics, and Aspects of Orbiting Bodies (Satellites)	-	A	-	-
32.2. General Laws	-	A	-	-
32.3. Orbital Parameters	-	A	-	-
32.4. Orbits Used by SIGINT Collectors	-	A	-	-
32.5. Characteristics and Factors Affecting Satellite Orbits	-	A	-	-
33. COLLECTION SYSTEMS **TR: JTENS; Space Handbook Analyst's Guide, Vols 1 & 2;** **AU-18, Air University Press**				
33.1. National SIGINT Collection Platforms	-	A	-	B
33.2. Airborne SIGINT Collection Platforms	-	A	-	B
33.3. AF Tactical Airborne Assets	-	A	-	B
33.4. Terrestrial SIGINT Collection Platforms	-	A	-	B
33.5. DCGS SIGINT Systems	-	A	-	B
34. TOOLS AND DATA PROCESSING **TR: Technical Reference for Information Operations;** **USSID AP 2401, AP2402, AP2503, CR 1030, CR1422,** **CR1423, CR1500, CR1551, DA3215, SG5301, SG5302;** **INTELINK:** **atcail.trojan.ic.gov/sed/certification/apprentice_98J_24.html**				
34.1. DoD Computer Networks, Applications and Analysis Tools				
34.1.1. INTELINK	-	A	-	-
34.1.2. JWICS (INTELINK SCI)	-	A	-	-
34.1.3. SIPRNET (INTELINK S)	-	A	-	-
34.1.4. NSANET	-	A	-	-
34.2. Communications Externals Parameters List (CEPL)	-	A	-	-
34.3. USSID System	-	A	-	-
34.4. Identify Collection, Processing, Analysis, and/or Reporting Requirements and Procedures Using the USSID System	-	1a	-	A
35. SIGNAL TECHNOLOGIES **TR: USSID AP 2401, AP2402, AP2503, CR1422, CR1423,** **CR1500, CR1551, DA3215, SG5301, SG5302**				
35.1. Telemetry	-	A	-	A
35.2. Digital Video/Voice	-	A	-	B
36. ALL-SOURCE REPORTING **TR: USSID AP 2401, AP2402, AP2503, CR1422, CR1423,** **CR1500, CR1551, DA3215, SG5301, SG5302**				

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
36.1. How All-source Collected Data is Used to Create a Finished Intelligence Product	-	A	-	-
37. ELECTRONIC WARFARE				
37.1. Electronic Support	-	A	-	B
37.2. Electronic Attack	-	A	-	B
37.3. Electronic Protection	-	A	-	B
38. COMINT COLLECTION AND ANALYSIS TR: Local Manuals				
38.1. Equipment Software Simulation				
38.1.1. Receivers	-	B	-	B
38.1.2. Frequency Counters	-	B	-	B
38.1.3. Synthesizers	-	-	-	B
38.1.4. Recorders	-	B	-	B
38.1.5. Demodulators	-	B	-	B
38.1.6. Demultiplexers	-	B	-	B
38.1.7. Translators/Converters	-	B	-	B
38.1.8. Digitizers	-	B	-	B
39. COMINT SIGNALS TECHNOLOGIES TR: SIGG1049, INTELINK: harvest.z6.z.nsa/Z6TRAIN/training/train.htm				
39.1. Morse	-	-	-	-
39.2. Facsimile	-	B	-	-
39.3. MODEMs	-	B	-	B
39.4. Integrated Services Digital Network (ISDN)	-	B	-	-
39.5. Wireless Communications	-	B	-	B
39.6. Packet	-	B	-	B
39.7. Short Duration Signal (SDS)	-	B	-	B
39.8. High Data Rate Signals (HDR)	-	B	-	B
39.9. Speech Privacy/Encipherment	-	B	-	B
40. SOFTWARE AND PROGRAMING TR: COMP 1119, Local Manuals, Unix Operating System Manual				
40.1. Computer Operating System Software	-	2	-	-
41. REPORTING TR: USSID CR1521, Local Directives				
41.1. Emergency Distress Signals	-	A	-	-
41.2. Search and Rescue (SAR)	-	A	-	-
42. COMPUTER NETWORKING TR: SIGG1049, NETW1980, INTELINK: harvest.z6.z.nsa/Z6TRAIN/training/train.htm				
42.1. Network Topology	-	A	-	A
42.2. Transmission Media	-	A	-	A
43. APPLIED MATHEMATICS TR: Math 1030, Math for SIGINT				
43.1. Apply Principles of Number Systems	-	2	-	-

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
43.2. Convert Numbers Using Scientific Notation	-	2	-	-
43.3. Manipulate Formulas	-	2	-	-
Attachment 5: STS - 1A8X2 Specific				
44. US/ALLIED ORDER OF BATTLE **TR: AFTTP 3-1 Vols.**				
44.1. Airborne Weapon Systems				
44.1.1. Electronic Warfare	-	A	-	B
44.1.2. Intelligence, Surveillance and Reconnaissance	-	A	-	B
44.2 Combined/Joint operations	-	A	-	B
44.3. Special Operations Forces (SOF)	-	A	-	B
44.4. Combat Air Forces (CAF)	-	A	-	B
44.5. Air Expeditionary Forces (AEF)	-	A	-	B
44.6. Command and Control	-	A	-	B
45. TRAFFIC ANALYSIS **TR: RTA Manual, NSA Directives, NCS TA-103,** **Applicable Working Aids and NSA TSRs**				
45.1. Communications structure/format	-	A	-	-
45.2. Message components	-	A	-	-
45.3. Callsign usage	-	A	-	-
45.4. Frequency usage	-	A	-	-
45.5. Internals	-	-	-	-
46. GEOSPATIAL INFORMATION AND SERVICES (GI&S) **TR: AFI 14-205, AFPAM 14-210, AFM 51-4, DIAM 57-24 Vols. 1 & 2, DIAM 65-2-1, DIA Point Reference Guidebook, GIPS, NIMA Catalog Vol. 1 Parts 1 & 4, CATMN Vols. 1 & 2, CHUM, DMA Manual 8750.1, DMA Technical Report 80-003, DMA Training Manual 78-002, DMA Training Manual 80-001, Applicable Command Directives**				
46.1. GI&S:				
46.1.1. Datums	-	A	-	-
46.1.2. Scale	-	A	-	-
46.1.3. Accuracy and Reliability	-	A	-	-
46.1.4. Marginal Data and Symbology	-	2b	-	-
46.1.5. Coordinate Systems	-	A	-	-
46.1.6. Convert Coordinates	-	2b	-	-
46.1.7. Plot and Extract Coordinates	-	2b	-	-
46.1.8. Compute Distance and Direction	-	2b	-	-
46.2. Fundamentals and Uses of GI&S Products:				
46.2.1. Charts	-	a	-	-
46.2.2. Imagery	-	a	-	-
46.2.3. Target Materials	-	a	-	-
46.3. Construct Map Displays	-	2b	-	-

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
46.4. Ordering and Maintaining Geospatial Products	-	a	-	-
46.5. Chart Updating Manual (CHUM) Procedures	-	1a	-	-
46.6. Automated Point Mensuration	-	2b	-	-
47. TARGET FORCES FAMILARIZATION **TR: AFTTP 3-1 Vols., DIA Intelligence Production Code Documents, NSA TSR, Local Working Aids**				
47.1. Conventional military, paramilitary and/or unconventional forces case studies				
47.1.1. Order of Battle and Structure	-	A	-	-
47.1.2. Missions	-	A	-	-
47.1.3. Weapons systems	-	A	-	-
47.1.4. Communications and equipment	-	A	-	-
47.1.5. Tactics, Techniques and Procedures	-	A	-	-
48. LAND/SEA/AIR RADAR FUNCTIONS **TR: AFTTP 3-1 Vol. 2, NCS IS-070**				
48.1. Early Warning/Height Finder	-	A	-	B
48.2. Missile guidance/Target Tracker	-	A	-	B
48.3. Air Traffic Control	-	A	-	B
48.4. Aid-to-intercept	-	A	-	B
48.5. Navigational	-	A	-	B
48.6. Meteorological	-	A	-	B
49. INFLIGHT COMMUNICATIONS/REPORTING **TR: AFI 11-290, TOs and User's Manuals**				
49.1. Voice Communication Modes/Format				
49.1.1. UHF/VHF/HF/SATCOM	-	1a	-	B
49.1.2. Radio Discipline	-	A	-	B
49.2. Data Communications Modes/Format	-	A	-	B
49.3. CRITIC	-	B	-	B
49.4. Serialized reporting	-	A	-	B
49.5. Tactical reporting	-	A	-	B
49.6. Post mission reporting	-	A	-	B
49.7. Datalink reporting	-	A	-	B
49.8. Joint Spectral Interference reporting	-	A	-	B
49.9. Combat Advisory/Imminent Threat Warning	-	A	-	B
49.10. SIGINT Threat Warning	-	A	-	B
50. TARGETING **TR: AFI 14-207, AFPAM 14-210**				
50.1. Attack Mission Cycle and the Targeting Process	-	A	-	B
50.2. National, Theatre, & Component Level Objectives and Guidance	-	A	-	B
50.3. Types of Target Materials Used in the Targeting Process	-	A	-	B
50.4. HVI (TST) and Conventional Targeting Process Additives	-	A	-	B
50.5. Target Development	-	A	-	B

TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	A 3-Skill Level		B 5-Skill Level	
	Aircrew Fundamentals	AFSC Technical Principles	Aircrew Fundamentals CDC	AFSC Technical Principles CDC
50.6. Target Development Functions:				
50.6.1. Target Analysis	-	A	-	B
50.6.2. Target Validation	-	A	-	B
50.6.3. Documentation	-	A	-	B
50.6.4. Target Nomination	-	A	-	B
50.6.5. Collection and Exploitation Requirements	-	A	-	B
51. AIRCREW/FLIGHT MANAGEMENT **TR: AFPD 11-4, AFI 11-401, 11-402, 11-412, 11-202, 38-201**				
51.1. Career Field	-	-	-	A
51.2. Functional	-	-	-	A
51.3. Utilization	-	-	-	A

Section B – Course Objective List

4. Measurement.

Each objective is indicated as follow: **W** indicates task or subject knowledge which is measured using a written test, **PC** indicates required task performance which is measured with a performance progress check, and **PC/W** indicates separate measurement of both knowledge and performance elements using a written test and a performance progress check. **P** indicates performance test only.

5. Standard.

The standard is 85% on written examinations. Standards for performance measurement are indicated in the objective and delineated on the individual progress checklist. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained.

6. Proficiency Level.

Most task performance is taught to the "2" proficiency level which means the students can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient).

7. Course Objective.

These objectives are listed in the sequence taught by Block of Instruction.

7.1. **Initial Skills Course:**

NOTE: This course is being written. Information was not available at time of publication.

7.2. **Advanced Skills Course:**

NOTE: There is currently no advanced course. This area is reserved.

Section C – Support Material

8. Support Material.

The following list of support materials is not all-inclusive; however, it covers the most frequently referenced areas.

NOTE: This area is reserved.

Section D – Training Course Index

9. Purpose.

This section of the CFETP identifies training courses available for the specialty and shows how the courses are used by each MAJCOM in their career field training programs.

10. Air Force In-Residence Courses

Course Number	Course Title	Location
L3AQR1A811-01AB	Aircrew Fundamentals Course	Lackland AFB, TX

X2ABR1A832-0A1A	Apprentice Airborne ISR Operator	Goodfellow AFB, TX
S-V80-A	Combat Survival Training	Fairchild AFB, WA
S-V80-B	Emergency Parachute Training	Fairchild AFB, WA
S-V86-A	Water Survival Training	Pensacola NAS, FL
S-V90-A	Water Survival Training (Non-Parachuting)	Fairchild AFB, WA
S-V83-A	Special Survival	Fairchild AFB, WA
XBAZN1N251 0A3A	Intermediate Signals Analysis Course (CIN: A-232-0451/CDP: 028Y)	Corry Station, FL
XBAZN1N251 0A1A	Advanced Communications Signals Analysis (CIN: A-232-0452/CDP: 4375)	Corry Station, FL

11. Air Force Institute for Advanced Distributed Learning (AFIADL) Courses.

COURSE NUMBER	COURSE TITLE	
CDC 1AX5X	Aircrew Journeyman Career Development Course	Note: both of these CDCs are under production and were not available at the time this CFETP was published
CDC 1A852	Airborne ISR Operator Journeyman Career Development Course	

Section E – MAJCOM Unique Requirements

The following list of MAJCOM unique requirements is not all-inclusive; however, it covers the most frequently referenced areas.

12. Major Command Courses.

COURSE NUMBER	COURSE TITLE	LOCATION	MAJCOM
CCALLB30ANOIQ	Compass Call Block 30 Analysis Operator Initial Qualification	Davis Monthan AFB, AZ	ACC
CCALLB30ANORQ	Compass Call Block 30 Analysis Operator Requalification	Davis Monthan AFB, AZ	ACC
CCALLB30ANOTX	Compass Call Block 30 Analysis Operator Transition	Davis Monthan AFB, AZ	ACC
CCALLB30MCS	Compass Call Block 30 Mission Crew Supervisor	Davis Monthan AFB, AZ	ACC
EC130HINST	Compass Call Mission Crew Instructor Qualification	Davis Monthan AFB, AZ	ACC
E8IAIT	E-8 Instructor Airborne Intelligence Technician	Robins AFB, GA	ACC
E8AIT-QT	E-8 Airborne Intelligence Technician – Qualification Training	Robins AFB, GA	ACC
E8AIT-RQ	E-8 Airborne Intelligence Technician – Requalification Training	Robins AFB, GA	ACC
CFIC135/E4	RC/OC/WC-135 and E-4B Aircraft Central Flight Instructor Course	Offutt AFB, NE	ACC
MC12APGO1	MC-12 Aerial Precision Geo-location Operator Basic Course	Meridian, MS	ACC
MC12APG02	MC-12 Aerial Precision Geo-location Operator Requalification Course	Meridian, MS	ACC
RC135SSD1	RC-135 Special Signals Development Initial/Mission Qualification	Offutt AFB, NE	ACC
SSAITC	Senior Scout C-130(SS) Aircrew Instructor Training Course.	Salt Lake City, UT	ANG
SSIQT-1	Senior Scout C-130(SS) Initial Qualification Training	Salt Lake City, UT	ANG
SSIQT-2	Senior Scout C-130(SS) Requalification Training	Salt Lake City, UT	ANG
SSIQT-3	Senior Scout C-130(SS) Transition Training	Salt Lake City, UT	ANG
SSSIGMQT	Senior Scout C-130(SS) Special Signals Operator Mission Qualification Training	Salt Lake City, UT	ANG